

Claims

- 290 1. An electric circuit board component, in particular an RF coaxial connector, in which the housing (1) of the component is secured on the circuit board (7) by way of solder joints between SMD solder connections provided on the bottom side (6) of said housing and solder connections assigned thereto on the circuit board,
- 295 characterized in that the housing (1), for additionally securing the same to the circuit board (7), has on the bottom side (6) thereof a plurality of solderable bolt pins (11) which engage in continuous plated bolt holes (12) assigned thereto on the circuit board
- 300 (7) and are soldered in said bolt holes.
2. An electric circuit board component according to claim 1,
- 305 characterized in that the solder joints between the housing-side bolt pins (11) and the bolt holes (12) in the circuit board are in the form of SMD solder joints.
- 310 3. An electric circuit board component according to claim 1 or 2,
- characterized in that the housing (1), inclusive of the bolt pins (11) thereof, consists of plastics material, and in that at least the bolt pins (11) are provided with a solderable metallization.
- 315 4. An electric circuit board component according to claim 3,
- characterized in that the metallized bolt pins (11) are at reference potential.
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Subor

- 325 5. An electric circuit board component according to any of the preceding claims, characterized in that the cross-sectional area of the bolt pins (11) is selected to be considerably larger than the cross-sectional area of solder pins made of thin wires, as usually employed with such components.
- 330 6. An electric circuit board component according to claim 5, characterized in that the cross-sectional area of the bolt pins (11), in consideration of the number and material thereof, is selected to be so large that the mechanical load carrying capacity of the secured state of the housing (1) on the circuit board (7) sufficiently fulfils the requirements to be met thereby.
- 340 7. An electric circuit board component according to any of the preceding claims, characterized in that the bolt pins (11) projecting beyond the bottom side (6) of housing (1) constitute lugs preferably integrally formed on the lower edge of housing (1) on the outsides of side walls (8, 9) and back wall (10) thereof.
- 345 8. An electric circuit board component according to any of the preceding claims, characterized in that the plated inner wall (17) of the bolt holes (12) in the circuit board is of slightly conical design, and that the thus designed bolt holes (12) have their largest inside width on the side of circuit board (7) where the housing-side bolt pins (11) engage in the bolt holes (12).
- 350 9. A method of automatically providing circuit boards with electric circuit board components according to claim 1,
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Summary

360 characterized in that
in a first step, with the aid of a soldering paste,
all solder connections and all bolt holes (12) on the
circuit board (11) are provided with a layer of sol-
dering paste (15),
365 in a second step, the housing (1) is taken up by an
automatic pick & place machine and is applied to the
circuit board (7) exploiting the centering possibili-
ties established by the bolt pins (11) on the housing
and the bolt holes (12) in the circuit board, and
370 in a third step, the circuit board (7) along with the
housing (1) applied thereto is passed through an SMD
soldering furnace in which, in one operation, the
housing-side SMD solder connections of the contacting
feet (4, 5) are firmly soldered to the solder connec-
tions assigned thereto on the circuit board on the
375 one hand, and the bolt pins (11) on the housing are
firmly soldered to the bolt holes (12) assigned
thereto on the circuit board on the other hand.

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